

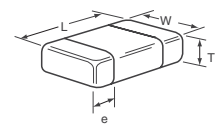
TAIYO YUDEN Multilayer Ceramic Chip Capacitors



Features: The use of Nickel (Ni) as material for both the internal and external electrodes improves the solderability and heat resistance characteristics. This almost completely eliminates migration and raises the level of reliability significantly. Low equivalent series resistance (ESR) provides excellent noise absorption characteristics. Compared to tantalum or aluminum electrolytic capacitors, these ceramic capacitors offer a number of excellent features, including: • Higher permissible ripple current values • Smaller case sizes relative to rated voltage • Improved reliability due to higher insulation resistance and breakdown voltage

Operating Temperature Range: • COG: -55° ~ 125°C • X7R: -55° ~ 125°C • X5R: -55° ~ 85°C • X5S: -55° ~ 85°C • X6S: -55° ~ 105°C • X7S: -55° ~ 125°C • Y5V: -30° ~ 85°C

Size Code	Dimensions (mm)			Size Code	Dimensions (mm)		
	L	W	e		L	W	e
0205	0.40	0.20	0.10	0603	1.60	0.80	0.35
0201	0.60	0.30	0.15	0812	1.60	3.20	0.30
0204	0.52	1.00	—	0805	2.00	1.25	0.50
0306	0.80	1.60	0.35	1206	3.20	1.60	0.50
0402	1.00	0.50	0.25	1210	3.20	2.50	0.60
0508	1.25	2.00	0.30	1812	4.50	3.20	0.90



Size Code	Type	WV DC	Capacitance	Tolerance	Dimension T (mm)	Digi-Key Part No.	Cut Tape Pricing			Digi-Key Part No.	Tape and Reel		Taiyo Yuden Part No.
							1	10	100		Qty.	Pricing	
F	COG (NPO)	16	0.5pF	±0.25pF	0.2	587-2270-1-ND	.34	2.52	11.77	587-2270-2-ND	15,000	30.27/M	EMK042CG0R5CC-FW
	COG (NPO)	16	1.0pF	±0.25pF	0.2	587-2261-1-ND	.34	2.52	11.77	587-2261-2-ND	15,000	30.27/M	EMK042CG010CC-FW
	COG (NPO)	16	1.2pF	±0.25pF	0.2	587-2276-1-ND	.34	2.52	11.77	587-2276-2-ND	15,000	30.27/M	EMK042CG1R2CC-FW
	COG (NPO)	16	1.5pF	±0.25pF	0.2	587-2277-1-ND	.34	2.52	11.77	587-2277-2-ND	20,000	30.27/M	EMK042CG1R5CC-FW
	COG (NPO)	16	1.8pF	±0.25pF	0.2	587-2278-1-ND	.34	2.52	11.77	587-2278-2-ND	15,000	30.27/M	EMK042CG1R8CC-FW
	COG (NPO)	16	2.0pF	±0.25pF	0.2	587-2262-1-ND	.34	2.52	11.77	587-2262-2-ND	15,000	30.27/M	EMK042CG020CC-FW
	COG (NPO)	16	2.2pF	±0.25pF	0.2	587-2281-1-ND	.34	2.52	11.77	587-2281-2-ND	15,000	30.27/M	EMK042CG2R2CC-FW
	COG (NPO)	16	2.7pF	±0.25pF	0.2	587-2282-1-ND	.34	2.52	11.77	587-2282-2-ND	20,000	30.27/M	EMK042CG2R7CC-FW
	COG (NPO)	16	3.0pF	±0.25pF	0.2	587-2263-1-ND	.34	2.52	11.77	587-2263-2-ND	15,000	30.27/M	EMK042CG030CC-FW
	COG (NPO)	16	3.3pF	±0.25pF	0.2	587-2285-1-ND	.34	2.52	11.77	587-2285-2-ND	15,000	30.27/M	EMK042CG3R3CC-FW
	COG (NPO)	16	3.9pF	±0.25pF	0.2	587-2286-1-ND	.34	2.52	11.77	587-2286-2-ND	15,000	30.27/M	EMK042CG3R9CC-FW
	COG (NPO)	16	4.0pF	±0.25pF	0.2	587-2264-1-ND	.34	2.52	11.77	587-2264-2-ND	15,000	30.27/M	EMK042CG040CC-FW
	COG (NPO)	16	4.7pF	±0.25pF	0.2	587-2288-1-ND	.34	2.52	11.77	587-2288-2-ND	20,000	30.27/M	EMK042CG4R7CC-FW
	COG (NPO)	16	5.6pF	±0.5pF	0.2	587-2290-1-ND	.34	2.52	11.77	587-2290-2-ND	15,000	30.27/M	EMK042CG5R6DC-FW
	COG (NPO)	16	5.0pF	±0.25pF	0.2	587-2265-1-ND	.34	2.52	11.77	587-2265-2-ND	15,000	30.27/M	EMK042CG050CC-FW
	COG (NPO)	16	6.0pF	±0.5pF	0.2	587-2266-1-ND	.34	2.52	11.77	587-2266-2-ND	20,000	30.27/M	EMK042CG060DC-FW
	COG (NPO)	16	6.8pF	±0.5pF	0.2	587-2292-1-ND	.34	2.52	11.77	587-2292-2-ND	15,000	30.27/M	EMK042CG6R8DC-FW
	COG (NPO)	16	7.0pF	±0.5pF	0.2	587-2267-1-ND	.34	2.52	11.77	587-2267-2-ND	15,000	30.27/M	EMK042CG070DC-FW
	COG (NPO)	16	8.0pF	±0.5pF	0.2	587-2268-1-ND	.34	2.52	11.77	587-2268-2-ND	15,000	30.27/M	EMK042CG080DC-FW
	COG (NPO)	16	8.2pF	±0.5pF	0.2	587-2294-1-ND	.34	2.52	11.77	587-2294-2-ND	15,000	30.27/M	EMK042CG8R2DC-FW
	COG (NPO)	16	9.0pF	±0.5pF	0.2	587-2269-1-ND	.34	2.52	11.77	587-2269-2-ND	15,000	30.27/M	EMK042CG090DC-FW
	COG (NPO)	16	10pF	±0.5pF	0.2	587-2271-1-ND	.34	2.52	11.77	587-2271-2-ND	20,000	30.27/M	EMK042CG100DC-FW
	COG (NPO)	16	12pF	±5%	0.2	587-2273-1-ND	.34	2.52	11.77	587-2273-2-ND	20,000	30.27/M	EMK042CG120JC-FW
	COG (NPO)	16	15pF	±5%	0.2	587-2274-1-ND	.34	2.52	11.77	587-2274-2-ND	15,000	30.27/M	EMK042CG150JC-FW
	COG (NPO)	16	18pF	±5%	0.2	587-2275-1-ND	.34	2.52	11.77	587-2275-2-ND	15,000	30.27/M	EMK042CG180JC-FW
	COG (NPO)	16	22pF	±5%	0.2	587-2279-1-ND	.34	2.52	11.77	587-2279-2-ND	15,000	30.27/M	EMK042CG220JC-FW
	COG (NPO)	16	27pF	±5%	0.2	587-2280-1-ND	.34	2.52	11.77	587-2280-2-ND	15,000	30.27/M	EMK042CG270JC-FW
	COG (NPO)	16	33pF	±5%	0.2	587-2283-1-ND	.34	2.52	11.77	587-2283-2-ND	20,000	30.27/M	EMK042CG330JC-FW
	COG (NPO)	16	39pF	±5%	0.2	587-2284-1-ND	.34	2.52	11.77	587-2284-2-ND	15,000	30.27/M	EMK042CG390JC-FW
	COG (NPO)	16	47pF	±5%	0.2	587-2287-1-ND	.34	2.52	11.77	587-2287-2-ND	15,000	30.27/M	EMK042CG470JC-FW
	COG (NPO)	16	56pF	±5%	0.2	587-2289-1-ND	.34	2.52	11.77	587-2289-2-ND	20,000	30.27/M	EMK042CG560JC-FW
	COG (NPO)	16	68pF	±5%	0.2	587-2291-1-ND	.34	2.52	11.77	587-2291-2-ND	20,000	30.27/M	EMK042CG680JC-FW
	COG (NPO)	16	82pF	±5%	0.2	587-2293-1-ND	.34	2.52	11.77	587-2293-2-ND	15,000	30.27/M	EMK042CG820JC-FW
	COG (NPO)	16	100pF	±5%	0.2	587-2272-1-ND	.34	2.52	11.77	587-2272-2-ND	20,000	30.27/M	EMK042CG101JC-FW
	X5R	10	100pF	±10%	0.2	587-2298-1-ND	.35	2.64	12.33	587-2298-2-ND	15,000	31.72/M	LMK042B1101KC-FW
	X5R	10	220pF	±10%	0.2	587-2300-1-ND	.35	2.64	12.33	587-2300-2-ND	20,000	31.72/M	LMK042B1221KC-FW
	X5R	10	470pF	±10%	0.2	587-2301-1-ND	.35	2.64	12.33	587-2301-2-ND	20,000	31.72/M	LMK042B1471KC-FW
	X5R	10	1,000pF	±10%	0.2	587-2299-1-ND	.35	2.64	12.33	587-2299-2-ND	20,000	31.72/M	LMK042B1102KC-FW
	X5R	6.3	2,200pF	±10%	0.2	587-2296-1-ND	.35	2.64	12.33	587-2296-2-ND	20,000	31.72/M	JMK042B1222KC-FW
	X5R	6.3	4,700pF	±10%	0.2	587-2297-1-ND	.35	2.64	12.33	587-2297-2-ND	15,000	31.72/M	JMK042B1472KC-FW
X5R	6.3	10,000pF	±10%	0.2	587-2295-1-ND	.35	2.64	12.33	587-2295-2-ND	20,000	31.72/M	JMK042B1103KC-FW	
COG (NPO)	25	5.6pF	±0.5pF	0.3	587-2305-1-ND	.16	1.00	3.60	587-2305-2-ND	15,000	8.01/M	TMK063CG5R6DPPGF	
COG (NPO)	25	6.8pF	±0.5pF	0.3	587-2306-1-ND	.16	1.00	3.60	587-2306-2-ND	15,000	8.01/M	TMK063CG6R8DPPGF	
COG (NPO)	25	8.2pF	±0.5pF	0.3	587-2308-1-ND	.16	1.00	3.60	587-2308-2-ND	15,000	8.01/M	TMK063CG8R2DPT-F	
COG (NPO)	25	10pF	±0.5pF	0.3	587-2302-1-ND	.16	1.00	3.60	587-2302-2-ND	15,000	8.01/M	TMK063CG100DPT-F	
COG (NPO)	25	22pF	±5%	0.3	587-2304-1-ND	.16	1.00	3.60	587-2304-2-ND	15,000	8.01/M	TMK063CG220JT-F	
COG (NPO)	25	82pF	±5%	0.3	587-2307-1-ND	.16	1.00	3.60	587-2307-2-ND	15,000	8.01/M	TMK063CG820JT-F	
COG (NPO)	25	100pF	±5%	0.3	587-2303-1-ND	.16	1.00	3.60	587-2303-2-ND	15,000	8.01/M	TMK063CG101JT-F	
X5R	25	220pF	±10%	0.3	587-1175-1-ND	.13	.80	2.88	587-1175-2-ND	15,000	7.21/M	TMK063B1221KP-F	
X5R	25	1,000pF	±10%	0.3	587-1177-1-ND	.16	1.00	3.60	587-1177-2-ND	15,000	8.01/M	TMK063B1102KP-F	
X5R	16	2,200pF	±10%	0.3	587-1178-1-ND	.16	1.00	3.60	587-1178-2-ND	15,000	8.01/M	EMK063B1222KP-F	
X5R	16	10,000pF	±10%	0.3	587-1180-1-ND	.16	1.00	3.60	587-1180-2-ND	15,000	8.01/M	EMK063B1103KP-F	
X5R	10	22,000pF	±10%	0.3	587-1181-1-ND	.22	1.44	5.77	587-1181-2-ND	15,000	13.62/M	LMK063B1223KP-F	
X5R	10	47,000pF	±10%	0.3	587-2242-1-ND	.24	1.60	6.41	587-2242-2-ND	15,000	15.22/M	LMK063B1473KP-T	
X5R	10	0.10µF	±10%	0.3	587-2241-1-ND	.26	1.76	7.05	587-2241-2-ND	15,000	16.82/M	LMK063B1104KP-T	
X5R	10	0.22µF	±20%	0.3	587-2483-1-ND	.27	2.04	9.53	587-2483-2-ND	15,000	24.51/M	LMK063B1224MP-F	
X5R	6.3	47,000pF	±10%	0.3	587-1182-1-ND	.22	1.44	5.77	587-1182-2-ND	15,000	13.62/M	JMK063B1473KP-F	
X5R	6.3	0.10µF	±10%	0.3	587-1183-1-ND	.24	1.60	6.41	587-1183-2-ND	15,000	15.22/M	JMK063B1104KP-F	
X5R	6.3	0.22µF	±20%	0.3	587-1819-1-ND	.35	2.64	12.33	587-1819-2-ND	15,000	32.04/M	JMK063B1224MP-F	
X5R	4.0	0.47µF	±20%	0.3	587-2147-1-ND	.34	2.72	16.42	587-2147-2-ND	15,000	51.26/M	AMK063B1474MP-F	
X7R	16	4,700pF	±10%	0.3	587-2478-1-ND	.16	1.00	3.60	587-2478-2-ND	15,000	8.01/M	EMK063B7472KP-F	
X7R	16	2,200pF	±10%	0.3	587-2479-1-ND	.16	1.00	3.60	587-2479-2-ND	15,000	8.01/M	EMK063B7222KP-F	
X7R	25	220pF	±10%	0.3	587-2482-1-ND	.13	.80	2.88	587-2482-2-ND	15,000	6.41/M	TMK063B7221KP-F	
X7R	25	470pF	±10%	0.3	587-2481-1-ND	.13	.80	2.88	587-2481-2-ND	15,000	6.41/M	TMK063B7471KP-F	
X7R	25	1,000pF	±10%	0.3	587-2480-1-ND	.13	.80	2.88	587-2480-2-ND	15,000	6.41/M	TMK063B7102KP-F	
X7S	6.3	0.10µF	±20%	0.3	587-2152-1-ND	.34	2.24	8.97	587-2152-2-ND	10,000	22.43/M	JWK105CG710AMP-F	
X6S	4.0	0.22µF	±20%	0.3	587-2153-1-ND	.38	2.88	13.45	587-2153-2-ND	10,000	36.84/M	AWK105CG822AMP-F	
X7R	10	0.10µF	±10%	0.8	587-1783-1-ND	.32	2.40	11.21	587-1783-2-ND				